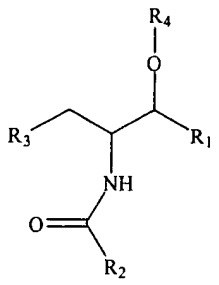
CLAIMS

We claim:

1. A compound selected from the group consisting of the formula:



where R_1 is an aromatic structure, an alicyclic structure, a branched aliphatic structure or a linear aliphatic group having 5 to 15 carbons; and

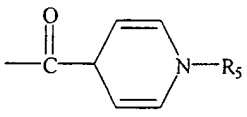
R_2 is an aliphatic chain having 2 to 18 carbons;

R_3 is a tertiary amine; and

R_4 is a group that is selectively hydrolyzed in a target cell.

2. The compound of Claim 1 wherein R_3 is pyrrolidino.

3. The compound of Claim 1 wherein R_4 is selected from the group consisting of an acetyl, $-C0(CH_2)_nCH_3$ wherein n is at least 1 and



and wherein R_5 is an alkyl group.

4. The compound of Claim 1 wherein R_1 is 4-hydroxyphenyl.

5. The compound of Claim 1 wherein R_1 is 3,4-ethylenedioxy.

6. A method for inhibiting the growth of cancer cells in a mammal comprising the step of administering to the mammal a therapeutically effective

amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

7. A method for treating a patient having sphingolipidosis by reducing glycosphingolipid synthesis comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

8. A method for treating a patient having a microbial or viral infection comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

9. A method for treating a patient having a drug resistant tumor, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

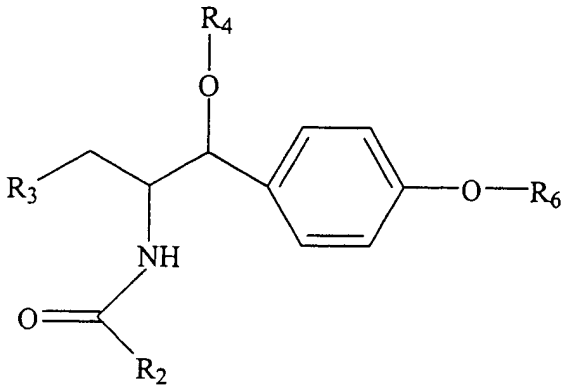
10. A method for reducing tumor angiogenesis in a patient comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

11. A vaccination method comprising the steps of:

a). removing cancer cells sensitive to the compounds below from a patient;

b). treating the cancer cells *in vitro* with an effective amount of a composition comprising the compound of Claim 1 and pharmaceutically acceptable salts thereof.

12. A compound selected from the group consisting of the formula:



where R_1 is an aromatic structure, an alicyclic structure, a branched aliphatic structure or a linear aliphatic group having 5 to 15 carbons; and

R_2 is an aliphatic chain having 2 to 18 carbons;

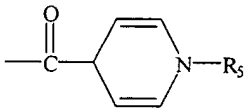
R_3 is a tertiary amine;

R_4 is a group that is selectively hydrolyzed in a target cell or a hydrogen; and

R_6 is a group that is selectively hydrolyzed in a target cell.

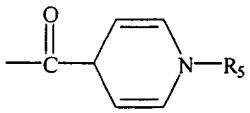
13. The compound of Claim 12 wherein R_3 is pyrrolidino.

14. The compound of Claim 12 wherein R_4 is selected from the group consisting of an acetyl, $-CO(CH_2)_nCH_3$ wherein n is at least 1 and



and wherein R_5 is an alkyl group.

15. The compound of Claim 12 wherein R_6 is selected from the group consisting of an acetyl, $-CO(CH_2)_nCH_3$ wherein n is at least 1,



and wherein R_5 is an alkyl group.

16. The compound of Claim 12 wherein R_1 is 4-hydroxyphenyl.

17. The compound of Claim 12 wherein R_1 is 3,4-ethylenedioxy.

18. A method for inhibiting the growth of cancer cells in a mammal comprising the step of administering to the mammal a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

19. A method for treating a patient having sphingolipidosis by reducing glycosphingolipid synthesis comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

20. A method for treating a patient having a microbial or viral infection comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

21. A method for treating a patient having a drug resistant tumor, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

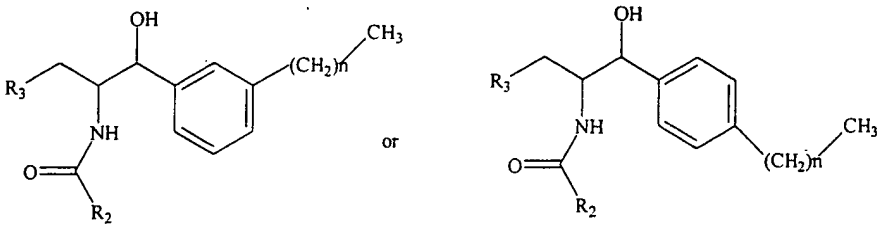
22. A method for reducing tumor angiogenesis in a patient comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

23. A vaccination method comprising the steps of:

a). removing cancer cells sensitive to the compounds below from a patient;

b). treating the cancer cells *in vitro* with an effective amount of a composition comprising the compound of Claim 12 and pharmaceutically acceptable salts thereof.

24. A compound selected from the group consisting of the formulas:



where R_2 is an aliphatic chain having 2 to 18 carbons; and

R_3 is a tertiary amine.

25. The compound of Claim 24 wherein R_3 is pyrrolidino.

26. A method for inhibiting the growth of cancer cells in a mammal comprising the step of administering to the mammal a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.

27. A method for treating a patient having sphingolipidosis by reducing glycosphingolipid synthesis comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.

28. A method for treating a patient having a microbial or viral infection comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.

29. A method for treating a patient having a drug resistant tumor, comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.

30. A method for reducing tumor angiogenesis in a patient comprising the step of administering to the patient a therapeutically effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.

31. A vaccination method comprising the steps of:

a). removing cancer cells sensitive to the compounds below from a patient;

b). treating the cancer cells *in vitro* with an effective amount of a composition comprising the compound of Claim 24 and pharmaceutically acceptable salts thereof.